Inst. of Technol., Pasadena; * 1900, Jan. 19, Mt. Gilead, O. (Eig. Mitt.)

Astrophysical J.: Fine struct. & the wavelengths of the Balmer lines, 12 S. (**64**, 1926).

J. Amer. Inst. electr. Engrs.: Theory of electr. conductivity. Recent developm., 5 S. (**48**, 1929).

J. opt. Soc. America: Transmiss. & reflect. of gold & silver films (m. G. Moore), 3 S. (**16**, 1928).

Nature, London: Hydrogen doublet, 1 S. (**117**, 1926).

Physical Rev.: Compound interferometer f. fine struct. work, 7 S. (**29**, 1927). — Spectroscop. determinat. of e/m, 6 S. (**30**, 1927). — Relat. ships betw. singlets & triplets in the spectra of two electron syst., 8 S. — Temp. depend. of electron emiss. un. high fields, 3 S. (**33**, 1929). — Temp. depend. of electr. conduct., 5 S. (**34**, 1929). — Appearance of forbidden lines in spectra (m. L. D. Huff), 5 S. (**36**, 1930). — Struct. of soft X-ray lines, 5 S. (**38**, 1931).

Proc. nat. Acad. Sci. U. S. A.: Fine struct. of the helium arc spectr., 4 S. (**13**, 1927). — Rotation. Raman spectr. of carbondioxide (m. C. M. Lewis), 3 S. (**17**, 1931).

Z. Physik: Elektronenemiss. kalter Metalle, 5 S. (**47**, 1928). — Elektr. Leitfähigk. auf Grund d. Wellenmech., 20 S. (**48**. 1928).

v **Houstoun,** Robert Alexander, Dr. phil. 1906 Göttingen (Schüler v. W. Voigt †), D. Sc. 07 Glasgow; seit 08 Lect. physic. Optics, U. Glasgow; * 1883, Mai 23, Glasgow. (Eig. Mitt.)

Light & colour, 179 S., 1923. — Intermediate physics, 638 S., 1930. — A treatise on light, 6. Aufl., 11 + 494 S., 1930.

Nature, London: Measurem. of radiat. intensit. by photogr. meth. (**117**, 1926). — Fechner's law[1]), 2 S. (**125**, 1930).

Philos. Magazine: Evaluat. of the colors of the spectr. in terms of the three primary colors[2]), 8 S. (**45**, 1923). — Statist. investigat. of visibility of red light[3]), 8 S. (**46**, 1923). — Theory of the absorpt. of X-rays, 9 S. (**2**, 1926). — Has the temp. of radiat. any effect on its photogr. act.? 5 S. (**7**, 1929). — Weber's law & visual acuity[1]), 2 Mitt., 28 S. (**8** & **10**, 1928 & 1930). — Math. representat. of sensibility of differ. of colour, 15 S. (**9**, 1930). — Visibility of radiat. & dark adaptat., 17 S. (**10**, 1930). — Colour vis., 18 S. (**11**, 1931). — Weber's law & the yellow spot effect, 14 S. (**12**, 1931).

Proc. opt. Convent., London: New instrum. f. investigatg. colour vis., 7 S. (1926).

Mit [1]) J. F. Shearer, [2]) E. Dow, [3]) E. W. M. Heddle.

Hove, Théo van, o. Prof. industr. Scheikde. & Dir. Labor. Toegep. en Elektro-Scheikde., U. Gent.

Acad. Roy. Belg. Bull. Cl. Sci.: Nouv. méth. de préparat. d. qqs. ethers simples, 2 Mitt., 29 S. (1906 & 1907). — Ét. dynam. de 2 dérivés alkylés de l'acide phosphor., 13 S. — Act. étherifiante de qqs. bases org., 14 S. (1909). — Dérivés fluorés du diphényle, 26 S. (**8**, 1922). — Nitrat. d. dérivés dihalogénés mixtes du benzène, 2 Mitt., 36 S. — Introduct. directe de substituants dans l. mercaptans aromat., 2 Mitt., 34 S. (**12** & **13**, 1927) (auch 3 Mitt., 27 S. Bull. Soc. chim. Belg. **36**, 1927).

Bull. Soc. chim. Belg.: Nitrat. d. dérivés dihalogénés mixtes du benzène, 18 S. (**36**, 1927).

Hovgaard, William, D. Eng. 1929 Kopenhagen; 01—33 Prof. Naval Design & Construct., Mass. Inst. Technol.; * 1857, Nov. 28, Aarhus, Dänemark. (Who's who Amer.)

Submarine boats, 1887. — Voyages of the Norsemen to Amer., 1914. — Structur. design of warships, 1915. — Mod. hist. of warships, 1920. — Gen. design of warships, 1920.

Engineering: Theory of bending, 3 S. (**116**, 1923).

J. Math. & Phys., Mass.: New proof of the theory of ordinary bending & its extens. to beams of non-homogen. mater., 15 S. (**2**, 1923). — Determinat. of the stresses in a beam by means of the principle of least work, 27 S. (**4**, 1925). — Adjustm. of the elast. propert. of a model keel United States army airship rs — 1, 32 S. (**5**, 1925). — Elast. deformat. of pipebends, 50 S. (**6**, 1926). — Deformat. of plane pipes, 41 S. — Pipe bends, 59 S. (**7**, 1928). — Tests on high-press. pipe bends, 52 S. (**8**, 1929).

Proc. nat. Acad. Sci. U. S. A.: Principle of minimum energy & the mot. of fluids, 7 S. (**9**, 1923). — Determinat. of the stresses in a beam by means of the principle of least work, 8 S. (**11**, 1925). — Bending of a curve tube of circular cross sect., 6 S. (**12**, 1926). — Bending of a quasi-ellipsoidal shell w. spec. refer. to rigid airships, 8 S. (**13**, 1927). — Stress distribut. in welds, 7 S. — Stress distribut. in welded overlapped joints, 6 S. — Bending of curved tubes, 8 S. (**16**, 1930).

Science, N. Y.: Theoret. mech. in engng. schools, 4 S. (**71**, 1930).

Verh. int. Kongr. techn. Mech.: Bending of curved pipes, 11 S. (3. Stockholm, **2**, 1930).

Z. angew. Math. u. Mech.: Best. v. Balkenspanngn. m. Hilfe d. Variats.rechng. (übers. v. J. Malkin), 16 S. (**10**, 1930). — Spanngs.-verteilg. in Schweißgn., 8 S. (**11**, 1931).

Howard, Joseph Whitney, A. M. 1913 & Ph. D. 15 U. Ill., Urbana; 15 Instr. Chem., 19 Assist. Prof., 24 Assoc. Prof. & seit 27 Prof. Chem., State U. of Mont., Missoula; * 1889, Juni 18, Dixon, Ill. (Eig. Mitt.)

J. Amer. chem. Soc.: Encyme hydrolysis of benzyl succinate, 3 S. (**44**, 1922). — Antisept. act. of the zinc chloride salt of aniline (m. F. D. Stimpert), 3 S. (**45**, 1923). — Mechanism of the Hofmann rearrangem. of methyl aniline hydrochloride (m. C. G. Derick), 12 S. (**46**, 1924). — Addit. of chloroform to aldehydes, 2 S. (**47**, 1925). — Some alcohols containg. the trichloromethyl group, 2 S. (**48**, 1926). — Isopropyl- & butyltrichloromethyl carbinols, 2 S. (**49**, 1927). — Esters of tribromomethylphenylcarbinol, 2 S. (**52**, 1930).

J. Amer. pharm. Ass.: Some constituents of the mountain balm (**11**, 1922). — Desinfect. act. & toxicity of trichlor-isopropylalcohol (m F. D. Stimpert) (**14**, 1925).

J. chem. Educat.: Syst. of Labor. instruct. in org. Chem., 2 S. (**3**, 1925). — Story of copper, 19 S. (**6**, 1929). — Sapphires, 12 S. (**8**, 1931).

Org. Syntheses: Pyruv. acid (m. W. A. Fraser), 2 S. (IV, 1925).

Howe, George William Osborn, D. Sc. Durham; Hon. D. Sc. Adelaide; stud. U. Durham; 1900 Electr. Engr., Siemens Schuckert, Berlin; 03 Lect. Hull

Techn. Coll., 05 Lect., & 09 Assist. Prof. Electr. Engng., Imp. Coll., South Kensington; 20 Head Dep. Electr. Stand. & Measurem., Nat. Physic. Labor., Teddington; seit 21 James Watt Prof. of Electr. Engng. U. Glasgow; * 1875, Dez. 4, Charlton, Kent. (Who's who.)

1920—1921 Edit. of Radio Review. — Übersetzer v. A. Thomälen, Text-Book of electr. engng. — Exercises in electr. engng. (m. T. Mather), 1910, 1914, 1916, 1922 & 1924.

Electrician: Theory of long distance radiocommunicat., 2 Mitt., 4 S. (**93**, 1924). — Wireless matters. Electromagnet. screening in wireless telegraphy. — Effect of the earth in the transmiss. of electromagnet. waves in radiotelegr., 2 S. (**93**, 1924). — Wireless matters, 2 S. (**94**, 1925). — Magnetic units. Should names be given to them, & if so, to which? 2 S. (**105**, 1930).

Jahrb. drahtl. Telegr.: Phasen- & Gruppengeschwindigk. in einem ionisierten Medium, 3 S. (**30**, 1927).

J. sci. Instruments: Thermo-regulator circuit f. dir. current mains, 1 S. (**8**, 1931).

Philos. Magazine: Relat. of the audibility factor of a shunted telephone to the antenna current as used in the recept. of wireless signals, 2 Mitt., 6 S. (**35**, 1918).

Proc. Roy. Soc. London: High-frequency resist. of multiply-stranded insulated wire, 25 S. (**93**, 1917).

Radio Rev.: Capacity of rectangular plates & a suggested formula f. the capacity of aerials, 5 S. — Power required f. long dist. transmiss., 11 S. (1920).

IV **Howe,** Herbert Alonzo, A. M. 1877 Cincinnati, Sc. D. 84 Boston, LL.D. 1910 U. Denver & 13 Colo. Coll.; 1880 Prof. Astr. & Dir. Chamberlin-Observ., U. Denver, Ill.; * 1858, † 1926, Nov. 2. — (Nachr. v. D. Alter 2 S. m. Bildn. Popular Astronomy **35**, 1927; v. D. H. Menzel 3 S. Publ. astr. Soc. Pacific **38**, 1926.)

Elem. of descript. astr. rev. 1909.

Popular Astronomy: Clearing of an object glass, 1 S. (**33**, 1925).

IV–V **Howe,** James Lewis, Dr. phil. 1882 Göttingen (Schüler v. H. Hübner †); seit 94 Prof. Chem. Washington & Lee U., Lexington, Va.; * 1859, Aug. 4, Newburyport, Mass. (Eig. Mitt.) (Lebensbeschr. v. S. C. Lind 1 S. m. Bildn. Industr. & Engng. Chem. **18**, 1926.)

J. Amer. chem. Soc.: Adolf v. Baeyer †, 4 S. (Proc. **45**, 1923). — Ruthenium, 7.: Ruthenium dichloride (m. J. L. Howe jr. & S. C. Ogburn jr.), 8 S. (**46**, 1924); 8.: Isomer. chlorides (m. L. P. Haynes), 6 S.; 9.: Solubil. of ruthenium in hypochlorite solut. & an attempt to utilize the react. f. the quantitat. determinat. of the metal (m. F. N. Mercer), 7 S. (**47**, 1925); 10.: „Isomer." chlorides, 13 S.; 11.: Volumetr. estimat. of ruthenium, 3 S. (**49**, 1927).

Howell, Owen Rhys, Ph. D. 1920 U. Wales & 22 Cambridge, England, Dr. phil. 29 Zürich (Schüler v. V. Henri); stud. 09—14 U. Coll. Wales, Aberystwyth & 20—24 U. Cambridge & Zürich; 19—20 Assist. Lect. Chem., U. Coll. Wales; 23 Lect. Physic. Chem., U. Coll., Dundee; seit 26 Lect. Appl. Chem., U. & Coll. of Technol. Manchester; * 1892, Febr. 22, Narberth, Pembrokeshire, Wales. (Eig. Mitt.)

J. chem. Soc. London: Higher oxide of cobalt, 7 S. — Higher oxide of nickel, 2 Mitt., 20 S. (**123**, 1923). — Molecul. struct. in solut., 1.: Densit. & viscosit. of aqueous solut. of cobalt chloride & hydrochlor. acid, 13 S.; 2.: Refract. indices & surf. tens. of aqueous solut. of cobalt chloride & hydrochlor. acid, 13 S.; 3.: Electr. conductivit. of aqueous solut. of cobalt chloride & hydrochlor. acid, w. a note on the predict. of cryst. struct., 8 S. (1927); 4.: Densit., viscosit., & electr. conductivit. of aqueous solut. of cobalt chloride & hydrochlor. acid at diff. temp., 11 S. (1929).

Nature, London: Measurem. of the electr. conductivity of electrolytes (m. C. Handford), 1 S. (**127**, 1930).

Philos. Magazine: Cryst. struct. & absorpt. spectra. Cobaltous compounds (m. R. Hill), 16 S. (**48**, 1924).

Proc. Roy. Soc. London (A): Catalyt. decomposit. of sodium hypochloride by cobalt peroxide, 19 S. (**104**, 1923).

Siehe A. Findlay & V. Henri.

Howes, Horace Leonard, Ph. D. 1915 Cornell U., Ithaca, N. Y.; Prof. Physics, U. New Hampshire, Durham, N. H.; * 1882.

The fluoresc. of some frozen soluts. of the uranyl salts, 14 S., Thesis Cornell U., Ithaca, N.Y., Lancaster, 1915 (Physical Rev. **6**, 1915).

J. opt. Soc. Amer.: On bead spectra[1]), 8 S. (**15**, 1927).

Physical Rev.: Fluorescing sodium uranyl phosphate[2]), 3 S. (**7**, 1916). — Fluoresc. of four double nitrates[2]), 10 S. (**10**, 1917). — Cert. absorpt. bands in the spectra of the uranyl salts, 4 S. (**11**, 1918). — Luminesc. of samarium, 4 S. — Spectral struct. of the luminesc. excited by the hydrogen flame, 6 S. (**17**, 1921).

Mit [1]) M. K. Slattery, [2]) D. T. Wilber.

Siehe E. L. Nichols.

Howland, Raymond Clarence James, M. A., M. Sc.; Reader Math., U. Coll., London; Prof. Math., U. Coll., Southampton, Hampshire, Engl.

Philos. Magazine: Whirling speeds of shafts carrying concentrated masses, 15 S. (**49**, 1925). — Vibrats. of rods & shafts w. tens. or end-trust, 21 S. (**1**, 1926). — Oblique rebound of a ball fr. a fixed plane (m. T. W. Dickson), 8 S. (**2**, 1926). — Applicat. of an integr. equat. to the whirling speeds of shafts, 16 S. (**3**, 1927). — Calculat. of the periods of circular membranes & disks, 9 S. (**5**, 1928). — Note on a type of determinantal equat., 4 S. (**6**, 1928). — Vibrat. of revolving shafts, 15 S. (**12**, 1931).

Philos. Trans. Roy. Soc. London (A): Stresses in the neighbourhood of a circular hole in a strip under tens., 38 S. (**229**, 1930).

Proc. Roy. Soc. London (A): Stress syst. in an infinite strip, 31 S. (**124**, 1929).

Verh. int. Kongr. techn. Mech.: Stresses in flat plates containg. rivet holes, 6 S. (3. Stockholm, **2**, 1930).